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LISTS OF SPECIES

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A checklist of Pimplinae (Hymenoptera, Ichneumonidae) from the Estação Ecológica dos Caetetus in São Paulo state, with new records of *Neotheronia* Krieger, 1899 from Brazil

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Abstract. We provide a list of the Pimplinae from the Estação Ecológica dos Caetetus, São Paulo state, Brazil. A total of 286 specimens belonging to 17 species in 10 genera were collected from December 2002 to May 2004. *Pimpla* and *Neotheronia* were the most abundant genera with 45% and 10% specimens respectively. Fourteen species of Pimplinae were recorded for the first time from São Paulo state and 3 of them, *Neotheronia charli*, *N. cherfasi* and *N. lizzae*, were recorded for the first time from Brazil. We also provide diagnosis and images of the species.

Key words. Ephialtini; inventory; Neotropical Region; parasitoid wasp; Pimplini; South America.

INTRODUCTION

The Pimplinae is a relatively large subfamily of the family Ichneumonidae. The Pimplinae is divided into 3 tribes, Delomeristini, Ephialtini and Pimplini, and comprises 2000 described species in 78 genera worldwide (Yu et al. 2012). The subfamily includes idiobiont ecto- and endoparasitoids, koinobiont ectoparasitoids, and egg predators (Quicke 2015).

Taxonomic works of Gauld (1991) and Gauld et al. (1998, 2002) are the primary sources of information on the Neotropical ichneumonids. Recent studies show that the ichneumonid fauna of South America still contains many undescribed species (e.g., Palacio et al. 2010, Valera & Días 2010, Veijalainen et al. 2012, Gómez et al. 2014, Gómez & Yabar-Landa 2015, Pádua et al. 2015, Sääksjärvi et al. 2015, Bordera et al. 2016).

There are 25 genera and 93 species of Pimplinae recorded for Brazil (Fernandes et al. 2015). Most of the data from Brazil are from checklists for the states of Paraná and Minas Gerais (Kumagai & Graf 2000, 2002, Kumagai 2002, Tanque & Frieiro-Costa 2011). Thus, there is still a gap in the knowledge of this group in the country that needs to be filled.

Among the Neotropical Pimplinae, *Neotheronia* is the most species-rich genus, with 72 species currently known for this region (Yu et al. 2012) and with 20 of these recorded from Brazil (Fernandes et al. 2015).

Members of this genus are mainly idiobiont parasitoids of lepidopteran prepupae or pupae and hyperparasitoids of icneumonids and tachinids (Diptera) (Gauld et al. 1998). All *Neotheronia* species differ from the other pimplines by the presence of the weakly to strongly tapered, untwisted, subequally bidentate mandible; a forewing with 3*rs-m* complete; hind wing with distal abscissa of *Cu*1 complete, joinig *cu-a* much closer to *M* than to 1*A*, and propodeum with a strong apical transverse carina (Gauld 1991).

This study provides a list the species of Pimplinae from Estação Ecológica dos Caetetus, with records of *Neotheronia charli* Gauld, 1991, *N. cherfasi* Gauld, 1991 and *N. lizzae* Gauld, 1991 for the first time from Brazil.

MATERIAL AND METHODS

The study was carried out in Estação Ecológica dos Caetetus (EEC) (Fig. 1). The EEC is 2,178.84 ha and located between the municipalities of Gália and Alvinlândia, state of São Paulo, Brazil, 22°20′ S to 22°30′ S, 049°40′ W to 049°45′ W. The EEC protects one of the last remnants of the originally continuous Atlantic Forest (Seasonal Semideciduous Forest) in western São Paulo state (Tabanez et al. 2005).

The samples were taken weekly using 2 Malaise traps (MT) from December 2002 to May 2004. The traps were installed about 300 and 500 m away from the EEC headquarters, on the Z1 and J2 trails, respectively. The distance between the traps was 200 m.

Species of Pimplinae were identified using taxonomic keys and original descriptions of Gauld (1991) and Gauld et al. (1998). The digital images were taken using a Leica DFC295 digital camera attached to a Leica M205C stereomicroscope, combined with a Leica Application Suite V4.1 software. The map was made using SimpleMappr (Shorthouse 2010). The specimens studied were deposited in the Invertebrate Collection of National Institute of Amazon Researches (INPA).

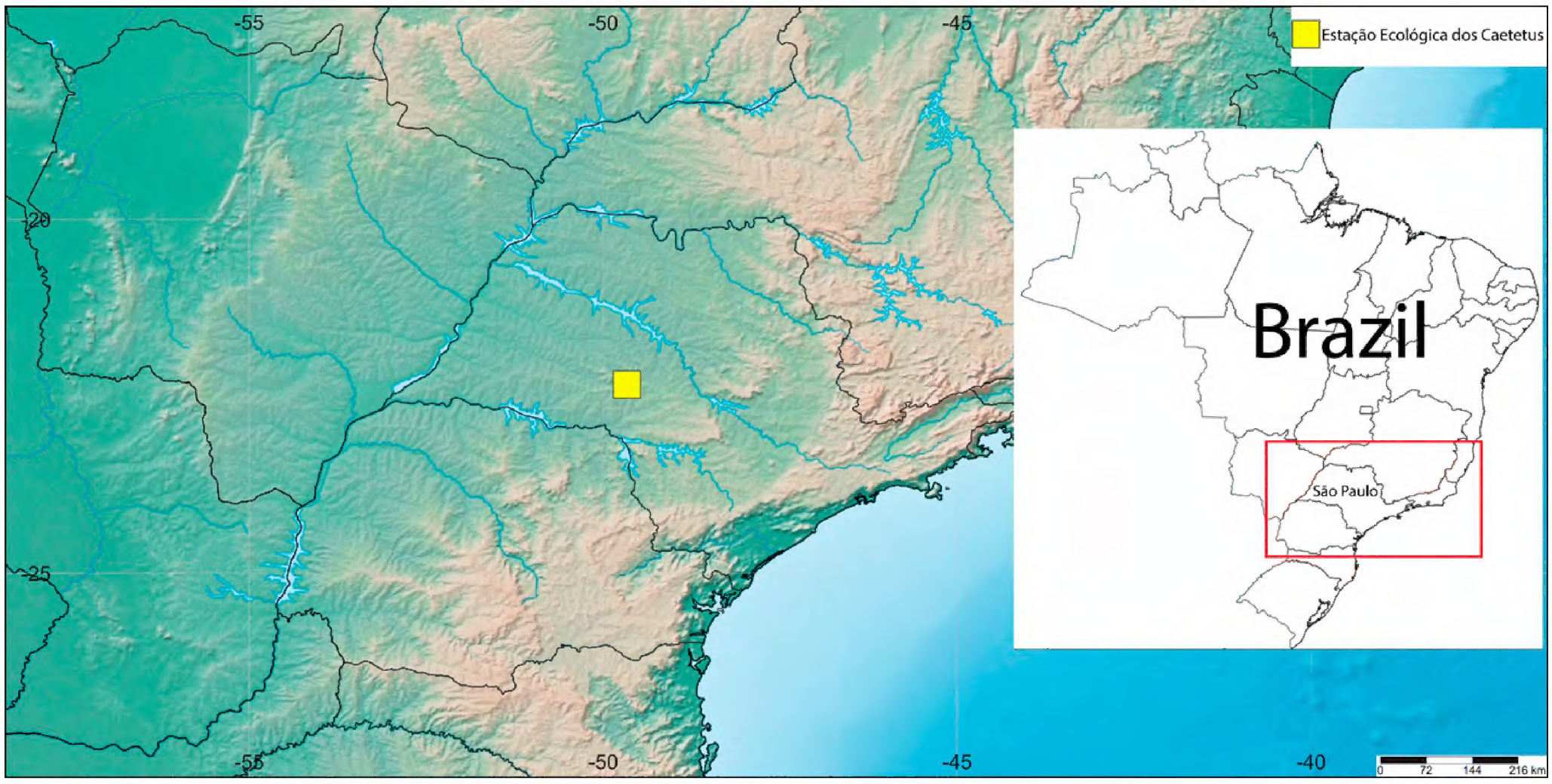

Figure 1. The location of the study area, Estação Ecológica dos Caetetus, São Paulo, Brazil.

RESULTS

Species list

Clistopyga jakobii Graf, 1985: Figure 2A
Clistopyga jakobii Graf (1985): 349.

Comments. This species can be distinguished from the other *Clistopyga* species by the combination of the following characters: 1) wing hyaline; 2) mesosoma generally ferruginous with yellowish and blackish marks; 3) metasoma dark ferruginous with tergites I–V laterally black with distal margin centrally white; 4) malar space about 0.9 times as long as basal mandibular width; 5) occipital carina complete, raised, forming a dorsomedial flange; 5) ovipositor sheaths about 2.4 times as long as hind tibia; 6) ovipositor upcurved at distal 0.6 (Graf 1985).

Distribution. Brazil (Minas Gerais, Paraná, São Paulo).

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha Z1, 10–17.i.2004, MT (J.F. Nunes col.), 1 ♀, INPA-HYM 031372; idem, but 08–15.i.2003, 1 ♀, INPA-HYM 031373; idem, but 18–25.x.2003, 2 ♀, INPA-HYM 031374, INPA-HYM 031376; idem, but 17–24.ii.2004, 1 ♀, INPA-HYM 031375; idem, but 20–27.xii.2003, 1 ♀, INPA-HYM 031377; idem, but Trilha J2, 20–27.ix.2003, 1 ♀, INPA-HYM 031378; idem, but 30.xi–24.xii.2003, 1 ♀, INPA-HYM 031379; idem, but 18–25.x.2003, 1 ♀, INPA-HYM 031380; idem, but 11–18.x.2003, 1 ♀, INPA-HYM 031381. Total: 10 ♀.

Dolichomitus moacyri Loffredo & Penteado-Dias, 2012: Figure 2B
Dolichomitus moacyri Loffredo & Penteado-Dias (2012): 102.

Comments. This species can be distinguished from the other *Dolichomitus* species by the combination of the following characters: 1) Body reddish brown with black and yellow markings; 2) antenna dark brown; 3) forewing yellowish with forewing anterior margin fuscous; 4) pronotum reddish brown; 5) ovipositor about 5.0 times as long as hind tibia (Loffredo & Penteado-Dias 2012).

Distribution. Brazil (São Paulo).

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha J2, 08–15.xi.2003, MT (J.F. Nunes col.), 1 ♀, INPA-HYM 031382; idem, but Trilha Z1, 1 ♂, INPA-HYM 031383. Total: 1 ♂ and 1 ♀.

Flacopimpla sulina Graf & Kumagai, 1997: Figure 2C
Flacopimpla sulina Graf & Kumagai (1997): 774.

Comments. This species can be distinguished from the other *Flacopimpla* species by the combination of the following characters: 1) body generally ferruginous; 2) legs whitish, the hind leg with femur, tibia and tarsus pale ferruginous, trochanter and femur with small black spot basally; 3) face subquadrate; 4) clypeus 2 times as broad as long medially; 5) malar space about 1.2 times as long as basal mandibular width; 6) tergite I about 1.3 times as long as wide posteriorly; 7) propodeum with 3 short longitudinal carinae posteriorly (Graf & Kumagai 1997).

Distribution. Brazil (Minas Gerais, Paraná, São Paulo).

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha Z1, 13–20.ix.2003, MT (J.F. Nunes col.), 1 ♀, INPA-HYM 031384; idem, but Trilha J2, 22–29.xi.2003, 1 ♀, INPA-HYM 031385; idem, but 24.i–03.ii.2003, 1 ♂, INPA-HYM 031386. Total: 1 ♂ and 2 ♀.

Flacopimpla varelae Gauld, 1991: Figure 2D
Flacopimpla varelae Gauld (1991): 362.

Comments. This species can be distinguished from the other *Flacopimpla* species by the combination of the following characters: 1) body generally orange, with whitish marks; 2) legs white, fore and mid legs with femora basally and apically black, tarsi infuscate; hind coxa exteroventrally, hind femur along outer side, and tibia basally and apically with black

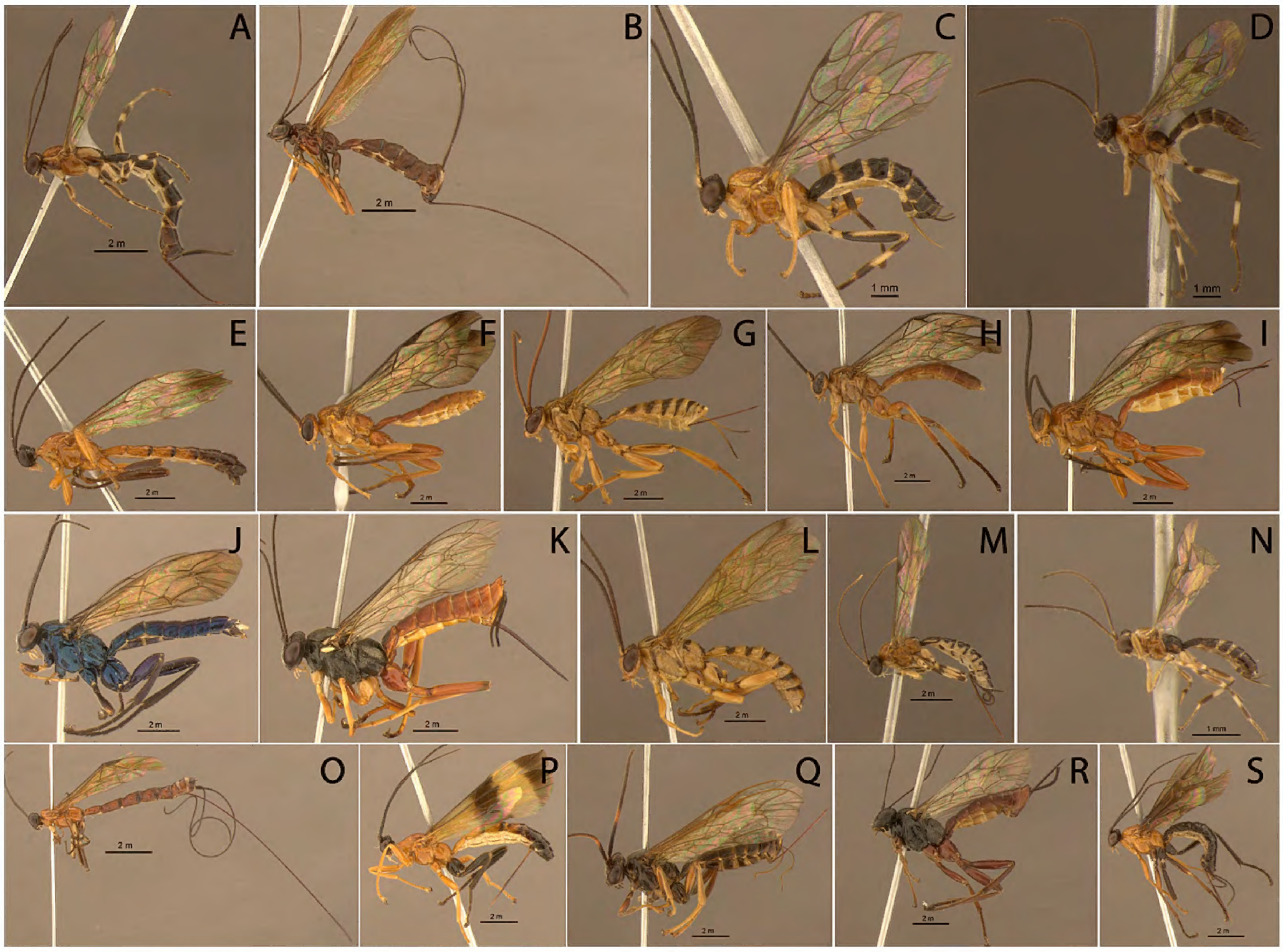

Figure 2. Some Pimplinae species from Estação Ecológica dos Caetetus: (**A**) *C. jakobii* Graf, ♀; (**B**) *D. moacyri* Loffredo & Pentado-Dias, ♀; (**C**) *F. sulina* Graf & Kumagai, ♀; (**D**) *F. varelae* Gauld, ♀; (**E**) *H. bicolor* (Brullé), ♂; (**F**) *N. chiriquensis* (Cameron), ♂; (**G**) *N. lineata* (Fabricius), ♀; (**H**) *N. lloydi* Gauld, ♂; (**I**) *N. tolteca* (Cresson), ♀; (**J**) *P. caerulea* (Brullé), ♀; (**K**) *P. croceiventris* (Cresson), ♀; (**L**) *P. sumichrasti* Cresson, ♂; (**M**) *Z. simonis* (Marshall), ♀; (**N**) *Z. alborhombarta* (Davis), ♀; (**O**) *Calliephialtes* sp, ♀; (**P**) *Hymenoepimecis* sp1, ♀; (**Q**) *Neotheronia* sp. 4, ♀; (**R**) *Pimpla* sp, ♀; (**S**) *Polysphincta* sp, ♀.

marks, hind tarsus blackish with basitarsus narrowly pale; 3) face transverse; 4) clypeus 1.2 times broader than long; 5) malar space about 1.0 times as long as basal mandibular width; 6) tergite I about 1.5 times as long as wide posteriorly; 7) propodeum without carinae, but with a weak median longitudinal trough (Gauld 1991).

Distribution. Brazil (Minas Gerais, São Paulo); Costa Rica.

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha J2, 04–11.x.2003, MT (J.F. Nunes col.), 2 ♀, INPA-HYM 031387, INPA-HYM 031388. Total: 2 ♀.

Hymenoepimecis bicolor (Brullé, 1846): Figure 2E

Epimecis bicolor Brullé (1846): 113.

Hymenoepimecis bicolor Viereck (1912): 149.

Comments. This species can be distinguished from the other *Hymenoepimecis* species by the combination of the following characters: 1) forewing hyaline or hyaline yellowish, apically blackish; 2) tergites II–V orange, with posterior margins narrowly black, the remaining tergites black; 3) sternite I with a nasute-like ventral protuberance; 4) ovipositor 1.0–1.3 times as long as hind tibia (Pádua et al. 2015).

Distribution. Brazil (Acre, Amazonas, Pará, Minas Gerais, Rondônia, São Paulo); Venezuela.

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha Z1, 28.ii–06.iii.2004, MT (J.F. Nunes col.), 1 ♂, INPA-HYM 031389. Total: 1 ♂.

Neotheronia charli Gauld, 1991: Figure 3A–C

Neotheronia charli Gauld (1991): 462.

Comments. This species can be distinguished from the other *Neotheronia* species by the combination of the following characters: 1) face convex; 2) occipital notch well developed; 3) epomia strong and very long; 4) propodeum with lateromedian longitudinal carina present; 5) ovipositor very short, not exceeding metasoma apex (Gauld 1991).

Distribution. Brazil (São Paulo); Costa Rica.

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha J2, 20–27.xii.2003, MT (J.F. Nunes col.), 1 ♀, INPA-HYM 031394; idem, but 20–27.ix.2003, 1 ♂, INPA-HYM 031395; idem, but 07–14.ii.2004, 1 ♀, INPA-HYM 031396; idem, but 10–17.i.2004, 1 ♂, INPA-HYM 031397; idem, but Trilha Z1, 27.xii.2002–03.i.2003, 1 ♀, INPA-HYM 031398; idem, but 07–14.ii.2004, 1 ♂, INPA-HYM 031399. Total: 3 ♂ and 3 ♀.

Neotheronia cherfasi Gauld, 1991: Figure 3D–F
Neotheronia cherfasi Gauld (1991): 454.

Comments. This species can be distinguished from the other *Neotheronia* species by the combination of the following characters: 1) body large, orange-brown; 2) wings infumate towards the apex; 3) vertex and mesoscutum orange; 4) clypeal margin very wide and weakly concave; 5) scutellum with lateral longitudinal carinae present only on anterior 0.3; 6) hind tarsus black; 7) ovipositor projecting beyond hind margin of subgenital plate by 3.0–3.1 times the length of hind tibia (Gauld 1991).

Distribution. Brazil (São Paulo); Costa Rica.

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha J2, 17–24.i.2003, MT (J.F. Nunes col.), 1 ♀, INPA-HYM 031400; idem, but Trilha Z1, 18–26.xi.2002, 1 ♂, INPA-HYM 031401. Total: 1 ♂ and 1 ♀.

Neotheronia chiriquensis (Cameron, 1886): Figure 2F
Theronia chiriquensis Cameron (1886): 264.
Neotheronia chiriquensis Morley (1914): 55.
Theronia (*Neotheronia*) *nigrolineata tolteca* Townes & Townes (1966): 35.

Comments. This species can be distinguished from the other *Neotheronia* species by the combination of the following characters: 1) occiput without a mediodorsal notch; 2) clypeus flat laterally; 3) propodeum entirely brownish orange, not anteriorly infuscate; 4) metasoma entirely brownish; 5) hind tarsus more-or-less fuscous; 6) ovipositor 1.2–1.4 times the length of hind tibia (Gauld 1991).

Distribution. Brazil (Minas Gerais, Paraná, São Paulo); Costa Rica; Nicaragua; Panama.

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha J2, 05–12.vii.2003, MT (J.F. Nunes col.), 1 ♂, INPA-HYM 031402. Total: 1 ♂.

Neotheronia lineata (Fabricius, 1804): Figure 2G
Bassus lineatus Fabricius (1804): 101.
Ichneumon striator Thunberg (1822): 261.
Pimpla alternans Brullé (1846): 105.
Pimpla consimilis Cresson (1865): 37
Theronia consimilis Cresson (1874): 397.
Neotheronia consimilis Krieger (1899): 120.
Pimpla brullei Dalla Torre (1901): 425.
Neotheronia brullei Schrottky (1902): 97.
Neotheronia alternans var. *alternans* Krieger (1905): 336.
Neotheronia alternans var. *nigrescens* Krieger (1905): 337.
Neotheronia alternans var. *rufescens* Krieger (1905): 337.
Neotheronia claripennis Cameron (1911): 177.
Neotheronia alternans Morley (1914): 57.
Theronia (*Neotheronia*) *consimilis* Townes & Townes (1966): 32.
Theronia (*Neotheronia*) *lineata* Townes & Townes (1966): 34.
Neotheronia lineata Gauld (1991): 412.

Comments. This species can be distinguished from the other *Neotheronia* species by the combination of the following characters: 1) head yellow with a black stripe joining the lateral ocellus and eyes, a black area around ocelli and with a black stripe extending back to form a broad band on occiput; 2) forewing with a black spot near the apex; 3) occipital carina mediodorsally distinctly notched; 4) pronotum with upper end of epomia quite strong, about 0.5 times the length of the basal mandibular width; 5) propodeum with lateral longitudinal carina in front of transverse carina present; 6) propodeum with a black marks on anterior margin and a medial stripe running from transverse carina to the posterior margin; 7) ovipositor 1.4–1.5 times the length of hind tibia (Gauld 1991).

Distribution. Argentina, Bolivia, Brazil (Bahia, Minas Gerais, Paraná, São Paulo); Colombia; Costa Rica; Cuba; Ecuador; Guyana; Mexico; Paraguay; Suriname; Trinidad; Uruguay; West Indies.

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha J2, 20–27.xii.2003, MT (J.F. Nunes col.), 1 ♀, INPA-HYM 031403; idem, but 19–26.vii.2003, 1 ♀, INPA-HYM 031404; idem, but 30.xi–06.xii.2003, 1 ♀, INPA-HYM 031405; idem, but 18–25.x.2003, 2 ♀, INPA-HYM 031406, INPA-HYM 031407; idem, but 26.xi–03.xii.2002, 1 ♀, INPA-HYM 031408; idem, but 06–13.ix.2003, 1 ♀, INPA-HYM 031409; idem, but 03–10.i.2004, 1 ♀, INPA-HYM 031410; idem, but 27.ix–04.x.2003, 1 ♀, INPA-HYM 031411; idem, but 25–31.x.2003, 1 ♀, INPA-HYM 031412; idem, but 30.viii–06.ix.2003, 1 ♂, INPA-HYM 031413; idem, but 31.x–06.xi.2003, 1 ♂, INPA-HYM 031414; idem, but Trilha Z1, 07–14.ii.2004, 2 ♂, INPA-HYM 031415, INPA-HYM 031418; idem, but 14–21.ii.2004, 2 ♂, INPA-HYM 031416, INPA-HYM 031417; idem, but 13–20.xii.2003, 1 ♀, INPA-HYM 031419; idem, but 30.iii–05.iv.2003, 1 ♀, INPA-HYM 031420; idem, but 11–18.x.2003, 1 ♀, INPA-HYM 031421; idem, but 24.iv–01.v.2004, 1 ♀, INPA-HYM 031422; idem, but 07–14.vi.2003, 1 ♀, INPA-HYM 031423; idem, but 22–29.xi.2003, 1 ♀, INPA-HYM 031424; idem, but 26.xi–03.xii.2002, 1 ♀, INPA-HYM 031425; idem, but 17–24.ii.2004, 1 ♀, INPA-HYM 031426; idem, but 19–26.vii.2003, 1 ♀, INPA-HYM 031427; idem, but 25–31.x.2003, 1 ♀, INPA-HYM 031428; idem, but 31.i–07.ii.2004, 1 ♀, INPA-HYM 031429; idem, but 27.xii.2003–03.i.2004, 1 ♀, INPA-HYM 031430. Total: 6 ♂ and 22 ♀.

Neotheronia lizzae Gauld, 1991: Figure 3G–I
Neotheronia lizzae Gauld (1991): 464.

Comments. This species can be distinguished from the other *Neotheronia* species by the combination of the following characters: 1) face convex; 2) occipital notch well developed; 3) epomia strong and very long; 4) upper end of the epicnemial carina reaching the anterior margin of pleuron; 5) ovipositor very short, not exceeding metasoma apex (Gauld 1991).

Distribution. Brazil (São Paulo); Costa Rica.

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha J2, 24–31.i.2004, MT (J.F. Nunes col.), 1 ♀, INPA-HYM 031431; idem, but 10–17.iv.2004, 1 ♀, INPA-HYM 031432; idem, but 01–08.v.2004, 1 ♀, INPA-HYM 031433; idem, but 18–25.x.2003, 1 ♀, INPA-HYM 031434; idem, but 10–17.i.2004, 1 ♂, INPA-HYM 031435; idem, but 03–10.i.2004, 1 ♂, INPA-HYM 031436; idem, but 14–21.ii.2004, 1 ♂, INPA-HYM 031437; idem, but 20–27.iii.2004, 1 ♂, INPA-HYM 031438; idem, but 10–17.v.2003, 1 ♂, INPA-HYM 031439; idem, but 10–17.iii.2003, 1 ♂, INPA-HYM 031440; idem, but 31.i–07.ii.2004, 1 ♂, INPA-HYM 031441; idem, but Trilha Z1, 13–20.xii.2003, 1 ♀, INPA-HYM 031442; idem, but 10–17.i.2004, 1 ♂, INPA-HYM 031443; idem, but 19–26.vii.2003, 1 ♂, INPA-HYM 031444. Total: 9 ♂ and 5 ♀.

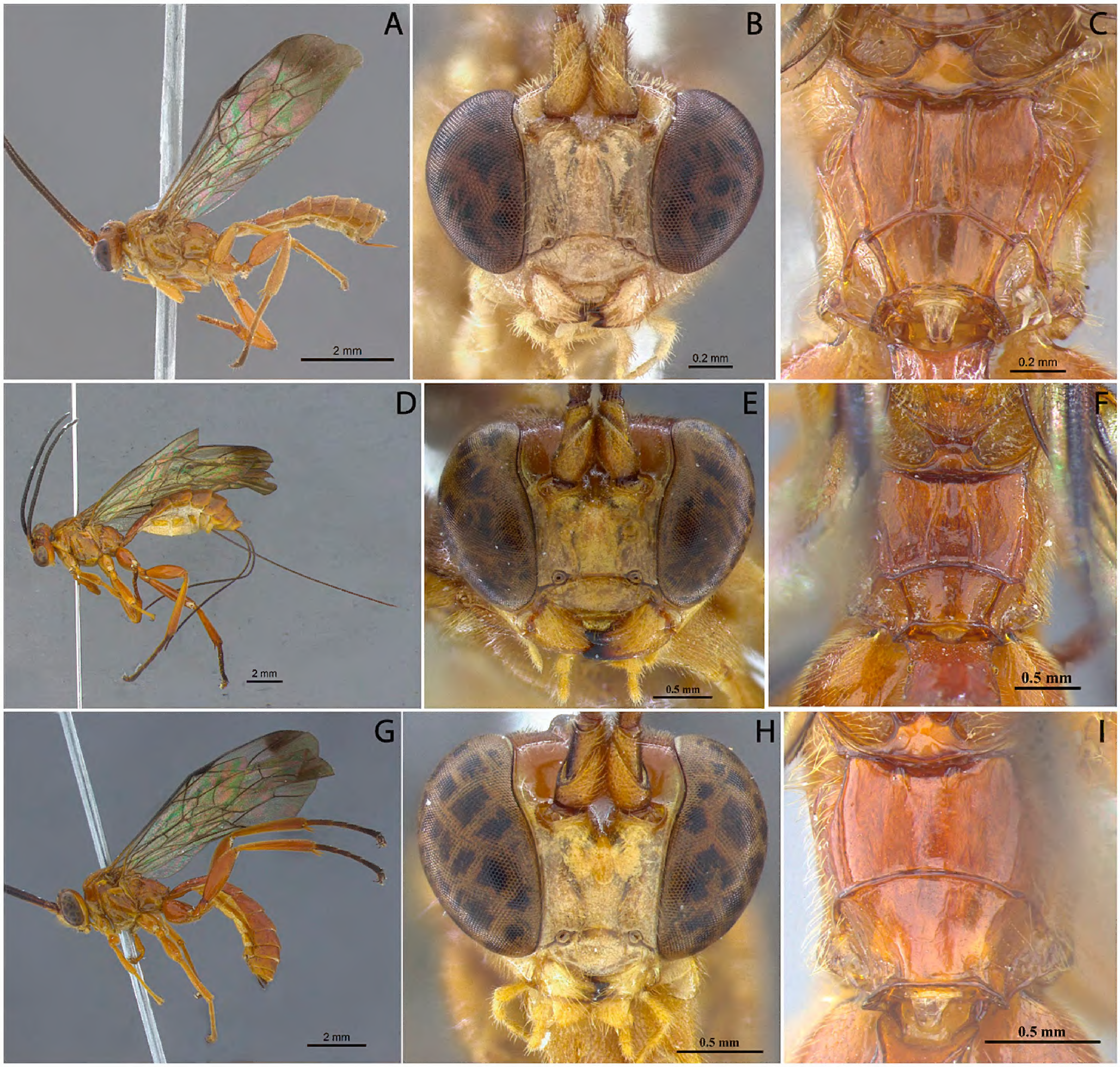

Figure 3. New records of the *Neotheronia* species from Brazil: **A–C**, *N. charli*, ♀: (**A**) habitus, lateral view; (**B**) face, frontal view; (**C**) propodeum, dorsal view. **D–F**, *N. cherfasi*, ♀: (**D**) habitus, lateral view; (**E**) face, frontal view; (**F**) propodeum, dorsal view. **G–I**, *N. lizzae*, ♀: (**G**) habitus, lateral view; (**H**) face, frontal view; (**I**) propodeum, dorsal view.

Neotheronia lloydi Gauld, 1991: Figure 2H

Neotheronia lloydi Gauld (1991): 425.

Comments. This species can be distinguished from the other *Neotheronia* species by the combination of the following characters: 1) metasoma pale yellowish; 2) tergite I with lateromedian longitudinal carinae strong, almost reaching posterior margin, and for the posterior 0.4 of their length close to each other and parallel; 3) tergite II with thyridium very broad and large; 4) female with ovipositor very short, not projecting beyond the metasomal apex (Gauld 1991).

Distribution. Brazil (Minas Gerais, Paraná, São Paulo); Costa Rica.

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha J2, 18–26.xi.2002, MT (J.F. Nunes col.), 1 ♂, INPA-HYM 031445; idem, but Trilha Z1, 18–25.x.2003, 1 ♀, INPA-HYM 031446. Total: 1 ♂ and 1 ♀.

Neotheronia tolteca (Cresson, 1874): Figure 2I

Theronia tolteca Cresson (1874): 396.

Neotheronia tolteca Krieger (1899): 120.

Theronia (*Neotheronia*) *nigrolineata tolteca* Townes & Townes (1966): 35.

Comments. This species can be distinguished from the other *Neotheronia* species by the combination of the following characters: 1) body generally orange brownish; 2) occipital notch well developed; 3) pleural carina complete, rather unevenly bent just behind centre; 4) upper end of the epicnemial carina reaching the anterior margin of pleuron; 5) ovipositor 0.9–1.1 times the length of hind tibia (Gauld 1991).

Distribution. Brazil (Minas Gerais, São Paulo); Costa Rica; Mexico; Panama.

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha J2, 20–27.xii.2003, MT (J.F. Nunes col.), 1 ♀, INPA-HYM 031447; idem, but 03–10.i.2004, 1 ♀, INPA-HYM 031448; idem, but 06–13.ix.2003, 1 ♀, INPA-HYM 031449; idem, but 22–29.xi.2003, 1 ♀, INPA-HYM 031450; idem, but 10–17.v.2003, 1 ♂, INPA-HYM 031451; idem, but 27.ix–04.x.2003, 1 ♀, INPA-HYM 031454; idem, but Trilha Z1, 17–24.iii.2003, 1 ♀, INPA-HYM 031452; idem, but 30.iii–05.iv.2003, 1 ♀, INPA-HYM 031453. Total: 1 ♂ and 7 ♀.

Pimpla caerulea Brullé, 1846: Figure 2J

Pimpla caerulea Brullé (1846): 101.

Coccygomimus caeruleus caeruleus Townes & Townes (1966): 24.

Comments. This species can be distinguished from the other *Pimpla* species by the combination of the following characters: 1) mesosoma and metasoma metallic blue; 2) wings blackish; 3) forewing with *Rs* more-or-less straight; 4) forewing with *cu-a* opposite to *Rs&M*; 5) male with fore coxae white marked anteriorly; 6) clypeus weakly concave apically; 7) metasoma with laterotergite V narrow, less than 0.3 times as long as wide; 8) female tergite I short and wide, strongly convex laterally (Díaz 2000).

Distribution. Argentina; Bolivia; Brazil (Paraná, Rio Grande do Sul, Rio de Janeiro, São Paulo, Santa Catarina); Costa Rica; Ecuador; Guatemala; Mexico; Peru; Paraguay; Venezuela.

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha Z1, 20–27.xii.2003, MT (J.F. Nunes col.), 1 ♂, INPA-HYM 031463. Total: 1 ♂.

Pimpla croceiventris (Cresson, 1868): Figure 2K

Tryphon croceiventris Cresson (1868): 36.

Pimpla semisanguinea Cresson (1874): 400.

Pimpla argentifrons Cameron (1886): 269.

Coccygomimus croceiventris Townes (1946): 43.

Pimpla croceiventris Gauld (1991): 525.

Comments. This species can be distinguished from the other *Pimpla* species by the combination of the following characters: 1) head and mesosoma black and metasoma reddish brown; 2) subalar prominence yellowish white; 3) laterotergites II–V narrow and inconspicuous, less than 0.2 times as long as wide; 4) clypeal margin weakly convex (Gauld 1991).

Distribution. Argentina; Brazil (Pará, Minas Gerais, Paraná, Rio de Janeiro, São Paulo); Colombia; Costa Rica; Ecuador; Guatemala; Mexico; Panama; Paraguay; Peru; Venezuela.

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha Z1, 14–21.vi.2003, MT (J.F. Nunes col.), 3 ♂, INPA-HYM 031464, INPA-HYM 031494, INPA-HYM 031528; idem, but 13–20.xii.2003, 5 ♂, INPA-HYM 031465, INPA-HYM 031472, INPA-HYM 031491, INPA-HYM 031499, INPA-HYM 031501; idem, but 06–13.xii.2003, 7 ♂, INPA-HYM 031466, INPA-HYM 031473, INPA-HYM 031480, INPA-HYM 031496, INPA-HYM 031497, INPA-HYM 031519, INPA-HYM 031518; idem, but 10–17.v.2003, 3 ♂, INPA-HYM 031467, INPA-HYM 031511, INPA-HYM 031514; idem, but 07–14.vi.2003, 2 ♂, INPA-HYM 031468, INPA-HYM 031488; idem, but 10–17.iii.2003, 2 ♂, INPA-HYM 031469, INPA-HYM 031516; idem, but 30.v–07.vi.2003, 2 ♂ and 1 ♀, INPA-HYM 031470, INPA-HYM 031529, INPA-HYM 031533; idem, but 24–31.i.2004, 1 ♂, INPA-HYM 031471; idem, but 28.vi–05.vii.2003, 1 ♂, INPA-HYM 031474; idem, but 13–20.ix.2003, 4 ♂, INPA-HYM 031475, INPA-HYM 031478, INPA-HYM 031479, INPA-HYM 031481; idem, but 19–26.iv.2003, 3 ♂ and 1 ♀, INPA-HYM 031476, INPA-HYM 031477, INPA-HYM 031503, INPA-HYM 031535; idem, but 15–22.xi.2003, 2 ♂, INPA-HYM 031482, INPA-HYM 031525; idem, but 27.ix–04.x.2003, 1 ♂, INPA-HYM 031483; idem, but 05–12.iv.2003, 1 ♂, INPA-HYM 031484; idem, but 31.i–07.ii.2004, 1 ♂, INPA-HYM 031485; idem, but 27.iii–03.iv.2004, 1 ♂, INPA-HYM 031486; idem, but 12–19.iv.2003, 3 ♂, INPA-HYM 031487, INPA-HYM 031490, INPA-HYM 031513; idem, but 05–12.iii.2004, 2 ♂, INPA-HYM 031489, INPA-HYM 031513; idem, but 26.xi–03.xii.2002, 1 ♂, INPA-HYM 031492; idem, but 13–20.iii.2004, 3 ♂, INPA-HYM 031493, INPA-HYM 031500, INPA-HYM 031530; idem, but 19–26.vii.2003, 7 ♂, INPA-HYM 031495, INPA-HYM 031498, INPA-HYM 031504, INPA-HYM 031505, INPA-HYM 031506, INPA-HYM 031507, INPA-HYM 031517; idem, but 10–17.i.2004, 1 ♂, INPA-HYM 031502; idem, but 04–11.x.2003, 1 ♂, INPA-HYM 031508; idem, but 20–27.iii.2004, 1 ♂, INPA-HYM 031509; idem, but 20–27.xii.2003, 2 ♂, INPA-HYM 031510, INPA-HYM 031527; idem, but 30.viii–06.ix.2003, 1 ♂, INPA-HYM 031512; idem, but 07–17.ii.2004, 2 ♂ and 1 ♀, INPA-HYM 031515, INPA-HYM 031532, INPA-HYM 031539; idem, but 10–17.iv.2004, 1 ♂, INPA-HYM 031520; idem, but 24.ii–03.iii.2003, 1 ♂, INPA-HYM 031521; idem, but 26.vii–02.viii.2003, 1 ♂, INPA-HYM 031522; idem, but ix.2003, 1 ♂, INPA-HYM 031523; idem, but 30.xi–06.xii.2003, 1 ♂, INPA-HYM 031524; idem, but 17–24.iv.2004, 1 ♂, INPA-HYM 031526; idem, but 16–23.viii.2003, 1 ♀, INPA-HYM 031534; idem, but 22–29.xi.2003, 2 ♀, INPA-HYM 031536, INPA-HYM 031537; idem, but 24–29.iii.2003, 1 ♀, INPA-HYM 031538; idem, but Trilha J2, 10–17.iv.2004, 1 ♀, INPA-HYM 031540; idem, but 16–23.viii.2003, 3 ♂ and 1 ♀, INPA-HYM 031577, INPA-HYM 031590, INPA-HYM 031591, INPA-HYM 031541; idem, but 03–10.xii.2003, 1 ♀, INPA-HYM 031542; idem, but 06–13.xii.2003, 2 ♂ and 1 ♀, INPA-HYM 031569, INPA-HYM 031554, INPA-HYM 031543; idem, but 28.vi–05.vii.2003, 5 ♂ and 1 ♀, INPA-HYM 031593, INPA-HYM 031583, INPA-HYM 031579, INPA-HYM 031560, INPA-HYM 031557, INPA-HYM 031544; idem, but 30.xi–06.xii.2003, 1 ♀, INPA-HYM 031545; idem, but 10–17.iii.2003, 1 ♂, INPA-HYM 031546; idem, but 30.viii–06.ix.2003, 2 ♂♂, INPA-HYM 031547, INPA-HYM 031556; idem, but 10–17.i.2003, 1 ♂, INPA-HYM 031548; idem, but 20–27.xii.2003, 2 ♂, INPA-HYM 031549, INPA-HYM 031565; idem, but 13–20.xii.2003, 1 ♂, INPA-HYM 031550; idem, but 17–24.iii.2003, 1 ♂, INPA-HYM 031551; idem, but 14–21.vi.2003, 2 ♂, INPA-HYM 031552, INPA-HYM 031575; idem, but 10–17.ii.2003, 1 ♂, INPA-HYM 031553; idem, but 04–11.x.2003, 1 ♂, INPA-HYM 031555; idem, but 02–09.viii.2003, 4 ♂, INPA-HYM 031558, INPA-HYM 031568, INPA-HYM 031585, INPA-HYM 031592; idem, but 24.iv–01.v.2004, 3 ♂, INPA-HYM 031559, INPA-HYM 031570, INPA-HYM 031571; idem, but 03–10.i.2004, 1 ♂, INPA-HYM 031561; idem, but 06–15.

xi.2003, 1 ♂, INPA-HYM 031562; idem, but 05–12.vii.2003, 1 ♂, INPA-HYM 031563; idem, but 01–08.v.2004, 1 ♂, INPA-HYM 031564; idem, but 20–27.ix.2003, 1 ♂, INPA-HYM 031566; idem, but 24–31.i.2004, 3 ♂, INPA-HYM 031572, INPA-HYM 031573, INPA-HYM 031574; idem, but 03–10.iii.2003, 1 ♂, INPA-HYM 031576; idem, but 14–21.vi.2003, 1 ♂, INPA-HYM 031578; idem, but 27.xii.2003–03.i.2004, 1 ♂, INPA-HYM 031580; idem, but 19–26.vii.2003, 2 ♂, INPA-HYM 031581, INPA-HYM 031584; idem, but 26.vii–02.viii.2003, 1 ♂, INPA-HYM 031582; idem, but 13–20.xii.2003, 1 ♂, INPA-HYM 031586; idem, but 30.v–07.vi.2003, 1 ♂, INPA-HYM 031587; idem, but 27.ix–04.x.2003, 1 ♂, INPA-HYM 031588; idem, but 20–27.iii.2004, 1 ♂, INPA-HYM 031589. Total: 117 ♂ and 13 ♀.

Pimpla sumichrasti Cresson, 1874: Figure 2L
Pimpla sumichrasti Cresson (1874): 400.
Coccygomimus sumichrasti Townes (1946): 44.

Comments. This species can be distinguished from the other *Pimpla* species by the combination of the following characters: 1) body predominantly yellow, head with frons below median ocellus, space between lateral ocellus and eye, mesosoma with 3 mesoscutal stripes on anterior margin and hind margin of scutellum black marked; 2) forewing with distal abscissa of *Rs* strongly sinuous; 3) submetapleural carina present only on anterior 0.4–0.5 of metapleuron; 4) metasomal tergites strongly punctate; 5) laterotergites II–V narrow and inconspicuous, less than 0.2 times as long as wide (Gauld 1991).

Distribution. Argentina; Brazil (Minas Gerais, Santa Catarina, São Paulo); Costa Rica; Ecuador; Guatemala; Mexico; Paraguay, Venezuela.

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha J2, 20–27.ix.2003, MT (J.F. Nunes col.), 1 ♂, INPA-HYM 031594. Total: 1 ♂.

Zaglyptus simonis (Marshall, 1892): Figure 2M
Pimpla Simonis [sic] Marshall (1892): 67.
Pimpla Simoni [sic] Schulz (1906): 104.
Polysphincta simonis Morley (1914): 111.
Zaglyptus simonis Townes & Townes (1960): 193.

Comments. This species can be distinguished from the other *Zaglyptus* species by the combination of the following characters: 1) clypeus moderatly broad, 1.8–2.1 times as wide as long; 2) metapleuron extensively reddish coloured centrally; 3) metasoma with tergite I laterally white marked; 4) ovipositor 1.6–1.9 times as long as hind tibia (Gauld 1991).

Distribution. Brazil (Minas Gerais, Santa Catarina); Costa Rica; Panama; Trinidad; Venezuela.

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha J2, 14–21.vi.2003, MT (J.F. Nunes col.), 1 ♀, INPA-HYM 031620; idem, but 21–28.ii.2004, 1 ♀, INPA-HYM 031621; idem, but 31.i–07.ii.2004, 1 ♀, INPA-HYM 031622; idem, but 06–13.xii.2003, 1 ♀, INPA-HYM 031623; idem, but 23–30.viii.2003, 1 ♀, INPA-HYM 031624; idem, but 03–10.i.2004, 1 ♀, INPA-HYM 031625; idem, but 12–19.iv.2003, 1 ♀, INPA-HYM 031626; idem, but 17–24.i.2004, 1 ♀, INPA-HYM 031627; idem, but Trilha Z1, 18–25.x.2003, 1 ♀, INPA-HYM 031628; idem, but 17–24.v.2003, 1 ♀, INPA-HYM 031629; idem, but 20–27.xii.2003, 1 ♀, INPA-HYM 031630; idem, but 10–17.i.2004, 1 ♀, INPA-HYM 031631; idem, but 15–22.xi.2003, 1 ♂, INPA-HYM 031632; idem, but 27.iii–03.iv.2004, 1 ♀, INPA-HYM 031633; idem, but 19–26.iv.2003, 1 ♀, INPA-HYM 031634; idem, but 13–20.ix.2003, 1 ♀, INPA-HYM 031635. Total: 16 ♀.

Zatypota alborhombarta (Davis, 1895): Figure 2N
Clistopyga alborhombarta Davis (1895): 198.
Zatypota alborhombarta Townes & Townes (1960): 279.

Comments. This species can be distinguished from the other *Zatypota* species by the combination of the following characters: 1) lower face and frontal orbits yellowish white, with the frontal orbital stripe extending backwards beyond the top of eye to curve slightly inwards behind ocelli; 2) occipital carina complete; 3) forewing with 2*rs-m* wider than long; 4) mesosoma reddish brown, with anterolateral margin of mesoscutum and base of notaulus broadly whitish yellow; tegula and subalar prominence whitish; 5) propodeum with longitudinal carina well developed; 6) pleural carina strongly developed before the propodeal spiracle (Gauld 1991).

Distribution. Brazil (Minas Gerais, Paraná); Costa Rica; Mexico; USA.

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha Z1, 08–15.xi.2003, MT (J.F. Nunes col.), 1 ♀, INPA-HYM 031636; idem, but 20–27.xii.2003, 2 ♀, INPA-HYM 031637, INPA-HYM 031640; idem, but 19–26.vii.2003, 1 ♀, INPA-HYM 031638; idem, but 27.xii.2003–03.i.2004, 1 ♀, INPA-HYM 031639; idem, but 31.i–07.ii.2004, 1 ♀, INPA-HYM 031641; idem, but 06–13.xii.2003, 1 ♀, INPA-HYM 031642; idem, but Trilha J2, 19–26.iv.2003, 1 ♀, INPA-HYM 031643; idem, but 13–20.iii.2004, 1 ♀, INPA-HYM 031644; idem, but 31.iii–05.iv.2003, 1 ♀, INPA-HYM 031645; idem, but 24–29.iii.2003, 1 ♀, INPA-HYM 031646; idem, but 17–24.iii.2003, 1 ♀, INPA-HYM 031647; idem, but 27.ix–04.x.2003, 1 ♀, INPA-HYM 031648; idem, but 24.i–03.ii.2003, 1 ♀, INPA-HYM 031649; idem, but 17–24.ii.2003, 2 ♀, INPA-HYM 031650, INPA-HYM 031652; idem, but 20–27.ix.2003, 1 ♂, INPA-HYM 031651; idem, but 03–10.ii.2003, 1 ♀, INPA-HYM 031653; idem, but 05–12.iii.2004, 1 ♀, INPA-HYM 031654; idem, but 06–13.xii.2003, 1 ♀, INPA-HYM 031655. Total: 20 ♀.

DISCUSSION

Our checklist includes 286 sampled of pimplines belonging to 10 genera and 29 species (17 identified to species and 12 undetermined morphospecies). The number of pimplines identified to species corresponded to approximatly 86% of all pimplines sampled. *Pimpla* was the genus with the largest number of individuals (149), followed by *Neotheronia* (69), totalizing 52% and 24%, respectively, of all of Pimplinae collected. *Neotheronia* was the most species-rich (7), while only 3 *Pimpla* species were found.

Clistopyga jakobii, *Flacopimpla sulina*, *F. varelae*, *Hymenoepimecis bicolor*, *Zaglyptus simonis*, *Zatypota alborhombarta*, *Neotheronia charli*, *N. cherfasi*, *N. chiriquensis*, *N. lizzae*, *N. lloydi*, *N. tolteca*, *Pimpla croceiventris* and *P. sumichrasti* are

recorded from São Paulo state for the first time and *N. charli*, *N. cherfasi* and *N. lizzae* are the first records from Brazil.

The number of individuals collected was greater than that reported in Kumagai and Graf (2000) and Tanque & Frieiro-Costa (2011), (208 and 100 individuals collected, respectively), but lower than Kumagai (2002) and Kumagai & Graf (2002), (306 and 620 individuals, respectively). Regarding the number of genera, all works mentioned above obtained more genera than our study (12 or 13 genera).

Pimpla croceiventris and *N. lineata* accounted for 45% and 10% of all the Pimplinae collected, respectively. *Pimpla croceiventris* is widely distributed in the Neotropical Region and *N. lineata* is frequently encountered from Mexico to Argentina, Paraguay and Uruguay (Gauld 1991). In comparision, *P. croceiventris* represented 27% (Tanque & Frieiro-Costa 2011), approximately 1% (Kumagai & Graf 2000), 0.3% (Kumagai & Graf 2002) of Pimplinae species from Paraná state, and 25% in samples from Minas Gerais state (Kumagai 2002). *N. lineata* represented only 2% of sampled pimplines in Kumagai & Graf (2000), 3% of total in Kumagai & Graf (2002), 4% in Tanque & Frieiro-Costa (2011) in Paraná state and 12% of the total in Minas Gerais state (Kumagai 2002).

We obtained 12 morphospecies (14% of all pimplines collected). This is due to the taxonomic difficulty of the group, the lack of specialists, the absence of modern comprehensive taxonomic works, and the difficulty in examining the type species or vouchers deposited in national and international collections. Below we insert the morphospecies and add comments to them.

***Calliephialtes* sp.**: Figure 2O

This specimen closely resembles *C. ferrugineus* Cushman, 1940 mainly in coloration and the length ovipositor (5.6 times as long as hind tibia), but differs from it by having: 1) malar space about 0.4 times as broad as high medially (0.1 in *C. ferrugineus*); 2) metasomal tergite I about 1.8 times as long as posteriorly broad (1.2–1.3 in *C. ferrugineus*).

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha Z1, 08–15.xi.2003, MT (J.F. Nunes col.), 1 ♀, INPA-HYM 031371. Total: 1 ♀.

***Hymenoepimecis* sp. 1**

This specimen resembles *H. japi* Sobczak, Loffredo, Penteado-Dias & Gonzaga, 2009 in having head with temple long in dorsal view, mesosoma orange with hind leg blackish with bases of coxae orange and tergites VI+ blackish, but differs from it in having: 1) lower face 1.0 times broader than high (0.7 in *H. japi*); 2) pronotum entirely orange (anteriorly blackish in *H. japi*); 3) tergite I orange (black in *H. japi*); 4) tergites II–V with posterior margins narrowly black (anteriorly blackish with posterior 2/3 black in *H. japi*).

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha J2, 17–24.i.2004, MT (J.F. Nunes col.), 1 ♂, INPA-HYM 031390; idem, 27.xii.2003–03.i.2004, 1 ♂, INPA-HYM 031391. Total: 2 ♂.

***Hymenoepimecis* sp. 2**: Figure 2P

This specimen closely resembles *H. neotropica* (Brues & Richardson, 1913) in coloration, but differs in having tarsal claw with basal lobe (tarsal claw with preapical tooth in *H. neotropica*).

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha J2, 17–27.xii.2002, MT (J.F. Nunes col.), 1 ♀, INPA-HYM 031392; idem, 03–10.i.2002, 1 ♀, INPA-HYM 031393. Total: 2 ♀.

***Neotheronia* sp. 1**

This specimen closely resembles *N. murilloi* Gauld, 1991, mainly in coloration, but differs from it in having: 1) epomia with upper end 0.3 times the length of basal mandibular width (0.5 in *N. murilloi*); 2) third segment of hind tarsus 2.0 times as long as broad (2.3–2.6 in *N. murilloi*).

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha Z1, 17–24.iii.2003, MT (J.F. Nunes col.), 1 ♂, INPA-HYM 031455. Total: 1 ♂.

***Neotheronia* sp. 2**.

This specimen resembles *N. cyrusi* Gauld, 1991, in coloration and in having propodeum long, with transverse carina well behind centre and submetapleural plate transverse, but differs from it in having: 1) lateral ocellus separated from eye by 1.5 times its own maximum diameter (1.2–1.3 in *N. cyrusi*); 2) epomia 0.5 times the length of basal mandibular width (0.8 in *N. cyrusi*).

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha Z1, 27.xii.2002–03.i.2003, MT (J.F. Nunes col.), 1 ♂, INPA-HYM 031456. Total: 1 ♂.

***Neotheronia* sp. 3**

This specimen resembles *N. lloydi* Gauld, 1991, in having metasoma pale yellowish, tergite I with lateromedian longitudinal carinae strong, almost reaching to posterior margin, close and parallel to posterior 0.4, and ovipositor very short, not projecting beyond the metasomal apex, but differs in having: 1) propodeum with very weak lateromedian longitudinal carina in the basal part (this carina is strong in the basal part of propodeum in *N. lloydi*).

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha Z1, 10–17.i.2004, MT (J.F. Nunes col.), 1 ♀, INPA-HYM 031457. Total: 1 ♀.

***Neotheronia* sp. 4**: Figure 2Q

This specimen differs from the other Neotropical *Neotheronia* species mainly in having brownish dark body with some yellowish and black marks and yellowish brown femora, tibiae and tarsi.

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha J2, 03–10.i.2004, MT (J.F. Nunes col.), 1 ♀, INPA-HYM 031458. Total: 1 ♀.

***Neotheronia* sp. 5**

This specimen closely resembles *N. lineata* (Fabricius, 1804), in coloration, but differs from it in having: 1) black marked in the anterior margin of propodeum and in a broad transverse band immediately in front of transverse carina (black marked in the anterior margin and medial stripe from transverse carina to hind margin of propodeum in *N. lineata*);

2) metasomal sternite brownish (yellowish in *N. lineata*); 3) tergite I 2.1 times as long as broad posteriorly (1.7 in *N. lineata*), 4) tergite II 0.6 times as long as broad posteriorly (0.9 in *N. lineata*).

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha Z1, 06–13.xii.2003, MT (J.F. Nunes col.), 1 ♂, INPA-HYM 031459; idem, Trilha J2, 20–27.xii.2003, 2 ♂, INPA-HYM 031460, INPA-HYM 031461. Total: 3 ♂.

***Neotheronia* sp. 6**

This specimen resembles to *lineata* species-group Gauld, 1991 in having a black stripe joining the lateral ocellus and the eye; a rather weak epomia ventrally; a strongly dipped occipital carina; a rather long ovipositor, but differs by the combination of the following characters: 1) scutellum black marked; 2) propodeum black marked basally in front of transverse carina; 3) metasoma with tergites I–III yellowish-brown and the remaining tergites black; 4) ovipositor 2.2 times the length of hind tibia. This specimen probably is a new species.

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha Z1, 25–31.x.2003, MT (J.F. Nunes col.), 1 ♀, INPA-HYM 031462. Total: 1 ♀.

***Pimpla* sp.**: Figure 2R

This specimen closely resembles *P. sanguinipes* Cresson, 1872 in having head and mesosoma entirely black, metasoma with laterotergites II and III less than 0.3 times as broad as long and ovipositor sheath 0.9 times as long as hind tibia, but differs from it in having: 1) mandibles with upper tooth about 1.5 times the length of the lower (2.0 in *P. croceiventris*); 2) metasoma entirely reddish brown (entirely black in *P. sanguinipes*).

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha J2, ix.2003, MT (J.F. Nunes col.), 1 ♂, INPA-HYM 031595; idem, 18–25.x.2003, 2 ♂, INPA-HYM 031596, INPA-HYM 031498; idem, 27.ix–04.x.2003, 1 ♂ and 1 ♀, INPA-HYM 031597, INPA-HYM 031601; idem, 06–13.ix.2003, 1 ♀, INPA-HYM 031599; idem, 16–23.viii.2003, 1 ♀, INPA-HYM 031600; idem, 27.xii.2002–03.i.2003, 1 ♀, INPA-HYM 031602; idem, 02–09.viii.2003, 1 ♀, INPA-HYM 031603; idem, 20–27.ix.2003, 1 ♀, INPA-HYM 031604; idem, 13–20.xii.2003, 1 ♀, INPA-HYM 031605; idem, Trilha Z1, 20–27.xii.2003, 2 ♀, INPA-HYM 031606, INPA-HYM 031608; idem, 13–20.ix.2003, 1 ♀, INPA-HYM 031607; idem, 26.xi–03.xii.2002, 1 ♂, INPA-HYM 031609; idem, 03–10.xii.2002, 1 ♂, INPA-HYM 031610; idem, 15–22.xi.2003, 1 ♂, INPA-HYM 031611. Total: 7 ♂ and 10 ♀.

***Polysphincta* sp.**: Figure 2S

These specimens differs from the Neotropical *Polysphincta* species mainly by the black wings (hyaline in others species).

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha Z1, 10–17.i.2003, MT (J.F. Nunes col.), 1 ♀, INPA-HYM 031612; idem, but 03–10.v.2003, 1 ♀, INPA-HYM 031613; idem, but Trilha J2, 12–19.vii.2003, 1 ♀, INPA-HYM 031614; idem, but 11–18.x.2003, 2 ♀, INPA-HYM 031615, INPA-HYM 031619; idem, but 31.iii–05.iv.2003, 1 ♀, INPA-HYM 031616; idem, but 18–25.x.2003, 1 ♀, INPA-HYM 031617; idem, but 25–31.x.2003, 1 ♀, INPA-HYM 031618. Total: 8 ♀.

***Zatypota* sp. 1**

This specimen belongs to the *morsei* species-group Gauld, 1991 in having most the occipital carina lacking, mesosoma entirely orange and propodeum without lateromedian longitudinal carinae, but this specimen differs by the combination of the following characters: 1) face with a small discrete triangular marks below antennal sockets and frontal orbits pale yellowish; 2) metasoma blackish brown with tergites II–V basally whitish; 3) tergite I with lateromedian longitudinal carinae extending at least to anterior 0.4.

Material. Brazil, São Paulo, Gália, Estação Ecológica dos Caetetus, Trilha J2, 19–26.vii.2003, MT (J.F. Nunes col.), 1 ♀, INPA-HYM 031656. Total: 1 ♀.

The new records of the Pimplinae fauna for the state of São Paulo and for Brazil contribute to the increase of biodiversity, as well as the distribution of the species to Brazil together in the southeast and south of the country, mentioned above. However, the lack of specialists in the group is insufficient and in addition, nothing is known of this fauna in the north, center west and northeast regions of the country.

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